

LESSON
2.6
Practice C *continued*

For use with pages 112–119

Name the property illustrated by the statement.

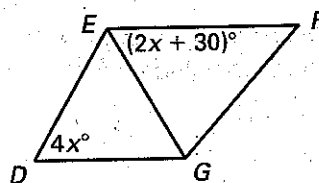
5. $\angle ABC \cong \angle CBA$
6. If $\angle RST \cong \angle 5$, then $\angle 5 \cong \angle RST$.
7. If $\overline{QS} \cong \overline{XR}$ and $\overline{RX} \cong \overline{SX}$, then $\overline{QS} \cong \overline{SX}$.

Solve for x using the given information. Explain your steps.

8. **GIVEN:** S is the midpoint of \overline{RT} .
 T is the midpoint of \overline{SU} .



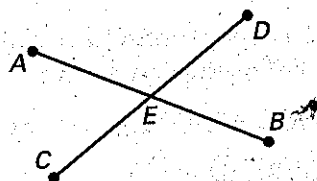
9. **GIVEN:** $\angle D \cong \angle DEG$, \overrightarrow{EG} bisects $\angle DEF$.



10. Write a two-column proof.

GIVEN: $\overline{AE} \cong \overline{CE}$
 \overline{AB} and \overline{CD} bisect each other.

PROVE: $\overline{EB} \cong \overline{ED}$


Statements
Reasons

11. **Marching Band** A marching band forms a *company front*, with all of the musicians in a straight line facing the audience. In this formation, Leon is halfway between Marge and Clay, Jade is halfway between Marge and Leon, and Ariel is halfway between Leon and Clay. Use the following steps to prove that the distance between Marge and Jade is the same as the distance between Ariel and Clay.

- a. Draw a diagram that represents the five musicians mentioned.
- b. Draw separate diagrams to show mathematical relationships.
- c. State what is given and what is to be proved.
- d. Write a two-column proof.